

Extreme Makeover: The Restructuring of the Atlantic Fisheries

ONE MIGHT SUGGEST THAT THE RECENT scientific report to the federal cabinet nominating northern cod for protection under the new *Species at Risk Act* ends the first chapter of Canadian history. Cod were one of the primary resources that attracted European settlers to the shores of the New World, and cod were at the heart of the fledgling Canadian industrial economy right through the 19th-century. In Atlantic Canada, cod and the fishery in general formed the backbone of the rural economy up until the last ten years of the 20th-century. It is not surprising, then, that Richard Cashin, the founder and a long-time leader of the Newfoundland fishermen's union, called the demise of the northern cod "a disaster of biblical proportions". Whether intended or not, Cashin's wording is apt since the biblical disasters, be it the great flood or the destruction of the cities of Sodom and Gomorrah, were never due strictly to natural causes. They were, according to the biblical authors, a result of human failings. Similarly, as Marian Binkley, in *Set Adrift: Fishing Families* (Toronto, University of Toronto Press, 2002), Rosemary E. Ommer, ed., in *The Resilient Outport: Ecology, Economy, and Society in Rural Newfoundland* (St. John's, ISER Books, 2002) and Reginald Byron, ed., in *Retrenchment and Regeneration in Rural Newfoundland* (Toronto, University of Toronto Press, 2003) clearly demonstrate, the collapse of the cod was not caused by natural factors such as environmental change as some have argued; it was the result of overfishing – overfishing primarily by Canadians.

What is not well known among Canadians is that the closure of the cod and other groundfisheries in 1993, which put 30,000 people out of work in Newfoundland, and thousands more in Nova Scotia, Prince Edward Island, New Brunswick and Quebec, was but one part of a more comprehensive devastation of rural communities in Atlantic Canada.¹ Not only had the fish stocks drastically declined, but there was both a corresponding loss in income and employment and a government restructuring of the fisheries that further accelerated the loss of fishing opportunities. This restructuring appeared necessary in order to restore the health of the fishing industry. To quote the most recent federal government fisheries policy document: "Despite having weathered a difficult period of adjustment and restructuring, the fisheries continue to be an important contributor to employment, income and economic opportunity". The document goes on to state that "despite the collapse of groundfish stocks, the industry has experienced good overall economic performance"; the value of landings and exports, for instance, increased by 50 per cent during the 1990s. This optimistic assessment of the Atlantic fisheries indicates, from the federal government's perspective, that the objectives of the restructuring exercise have been fulfilled and that it is now possible to achieve the government's vision of "biologically sustainable fisheries that are self-reliant, viable, and capable of contributing to the

¹ A similar process took place on the West Coast of Canada during roughly the same period. Groundfish refers to bottom dwelling fish species and include such species as cod, haddock, sole, pollock and halibut.

economic and social base of coastal communities over the long term”.² Yet, given the devastation experienced by Atlantic Canadian coastal communities and the failure of groundfish stocks to recover, what is the reason for this optimism and is it justified? This essay, in reviewing *Set Adrift*, *The Resilient Outport* and *Retrenchment and Regeneration*, will address these two questions.

These three books provide abundant evidence of the great depth and breadth of the devastation and suffering undergone by the residents of Atlantic Canadian coastal communities during the late 1980s and the 1990s. Taken together they document the nature of the fish stock collapse, its causes and its impact on the fishing families that depended on the resource. We see the loss of hope, spirit and solidarity in communities. We witness the heart-rending and massive out-migration of people deeply attached to their communities, who were forced to move to other areas of the country in search of work. This out-migration was especially widespread for the youth, who saw no future for themselves if they remained with their family, relatives and friends. We see the huge burden placed on women, who had to keep alive the spirits of their house-bound fishing husbands, who had to find jobs to keep their families financially afloat and who often had to deal with problem drinking that increased as the crisis deepened. We see how communities became places where there was less sharing and mutual support as people turned inward to try to survive. We see major divisions occurring within communities between those who had been given a reprieve, either through new fishing licences or from assistance programs, and those who had not.

At the same time, we see the heroism of people who love fishing above all else, and how some would not give up their fishing careers no matter how much they were told that they were to blame for the crisis or that there was no future in continuing. We see people who love nature and the sea, who have remarkable self-reliance and who have a great knowledge of ecology. We also witness people who speak for the fish and conservation even when the world is disintegrating around them. We see still others who wish to restore the spirit of community that always helped them to survive through the many difficult times in the past – even as their communities were being depopulated through out-migration.

As we read this documentation of tragedy and heroism, we also begin to see something else – something that is almost as disturbing as the suffering of these coastal residents: the restructuring of the Atlantic fisheries was not simply a necessity forced by the cruel reality of overfishing nor was the overall rationale of those leading the restructuring defensible. As pointed out by Ommer in the “Conclusion” to *The Resilient Outport* (pp. 342-3), the following assumptions made by policy-makers were a sadly superficial analysis of the Atlantic fisheries:

1. The crisis was forced by too many fishers chasing too few fish and resulted in the tragedy of the commons.
2. The large numbers of small-scale inshore fishermen were at the root of the problem and not the large, vertically integrated and profitable fishing companies.

2 Canada, Fisheries and Oceans, *A Policy Framework for the Management of Fisheries on Canada's Atlantic Coast* (Ottawa, 2004), pp. 1, 3, 7.

3. The fishery was an employer of last resort and people would be better off if they had other work opportunities.
4. The fishery of the future had to be lean and mean in order to compete in a global economy.
5. The coastal communities were backward, inefficient and non-productive and therefore a burden to Canadian tax-payers who had to support them through employment insurance and social transfers.

Taken together, these three books reveal these assumptions to be either patently false or, at best, based on a failure to recognize a more complex reality where outcomes could be very different within alternative policy environments. Indeed, the books demonstrate that the restructuring of the fisheries in Newfoundland began about 100 years ago when politicians decided that development in Newfoundland was to be based on modernization, industrialization and land-based extraction of natural resources.³ Since then, provincial economic development policy has been largely based on mega-industrial projects and outside corporate development. In like manner, the fishery evolved from merchants exploiting the fishers through the “truck system” of credit to the development of an industrial fishery led by large, vertically integrated corporations operating highly predatory fishing trawlers. In short, this progressive commercialization and industrialization of the Atlantic fisheries resulted in a long-term decline in fish stock abundance.⁴ For an equally long time, inshore fishers warned of an impending crisis.

Restructuring was further intensified between 1982 and 1993, the year the moratorium was put in place, as the federal Department of Fisheries and Oceans (DFO) launched an aggressive program of privatization of the fisheries resource through individual transferable quotas (ITQs). Although the DFO constantly denied that they were granting a private property right, many economists advocated the implementation of ITQs since, at the very least, they simulated a private property situation. The ITQs (called Enterprise Allocations in the corporate sector) entitled users to a set percentage of the total allowable catch for a given fish species each year. This right or a portion of it could be rented or sold through a market mechanism to other users so as to encourage rationalization of the fishery according to those who were most efficient in operating a fishing business. With shrinking fish stocks, the purchase price of quotas quickly escalated. In the mid-1990s, for example, the cost of purchasing the right to catch one pound of cod in Nova Scotia was \$3.00 when the landed price of cod was only \$1.00 per pound. Only well-financed individuals or vertically integrated corporations (that could absorb a loss through value-added processing) could afford to purchase such quotas. While there have been few attempts to fully document the degree of corporate concentration of quota ownership that has developed over the last two decades, it takes only a relatively superficial knowledge

3 See Michelle McBride, Gregory S. Kealey and Sean Cadigan, “Jobs at Any Cost: The Political Economy of Development in Twentieth Century Newfoundland”, in *The Resilient Outport*, pp. 265-88 and Sean Cadigan, “The Moral Economy of Retrenchment and Regeneration in the History of Rural Newfoundland”, in *Retrenchment and Regeneration*, pp. 14-42.

4 Jeffrey A. Hutchings, Barbara Neis and Paul Ripley, “The ‘Nature’ of Cod”, in *The Resilient Outport*, p. 140-85.

of the current fishing industry to know that, in many fisheries sectors, there are a limited number of quota owners remaining. Even in the fisheries where there are no ITQs, a privatizing effect has been realized in the transfer of licences. For example, in the southwest Nova Scotia lobster fishery, the value of an inshore lobster licence, boat and gear is now worth over one million dollars. This means that these “independent” family-based licences are only affordable to corporations who get around federal licensing policies prohibiting company ownership in this sector by signing “under-the-table” trust agreements with retiring fish harvesters. The difficulty such trust agreements pose for the succession of fishing licences to young fishers was finally recognized in a recent government discussion paper.⁵ The federal government still refuses to acknowledge, however, the greater problem stemming from privatization, in part because it refuses to recognize that it has, “de facto”, privatized the fisheries resources.

While the three books do not place much emphasis on ITQs, this development is important to understanding the almost simultaneous collapse of groundfish stocks throughout the Atlantic region and how numerous fishery sectors, and not just groundfish, were experiencing the social fallout of restructuring. ITQs were introduced in the corporately owned offshore sector in 1983. This sector alone collectively owned roughly 50 per cent of the entire Atlantic coast groundfish quota. Through the remainder of the 1980s and the early 1990s, there was extensive privatization of the highly efficient mid-shore or “intermediate scale” groundfish harvesting sector. Not only did this combined privatized fleet have access to a large majority of groundfish quota, but the grey literature of industry and government reports for this period (and the post-mortem testimonies to the Fisheries Resources Conservation Council) is replete with references to the high degree of discarding of groundfish at sea during this time.⁶ To make the best of their quota allocations, it was a frequent practice to discard less valuable fish in a catch so that every fish officially counted against a quota would bring maximum value to the quota holder. While this practice was not limited to only the privatized sector or necessarily practiced by every fleet segment in that sector, there is no doubt that ITQs served to intensify this abusive fishing practice. Thus, the century-long restructuring of the Atlantic fisheries was intensified through privatization and resulted in a corresponding intensification of the overexploitation of groundfish resources. When groundfish stocks finally collapsed in 1993, the restructuring process reached a kind of natural conclusion. Under such extreme conditions, only those who had positioned themselves through obtaining a privatized quota or other lucrative licences were able to survive the crisis.

And if this was not enough to restructure the fishery, another process began to transform the fishery still further. The collapse of the groundfish stocks was followed within a couple of years by a new government in Ottawa – a government whose first

5 Canada, Fisheries and Oceans, Atlantic Fisheries Policy Review, *Preserving the Independence of the Inshore Fleet in Canada's Atlantic Fisheries: A Discussion Document* (Ottawa, 2004).

6 The Fisheries Resources Conservation Council is an advisory body to the Minister of Fisheries and Oceans that holds public hearings, studies scientific stock assessment reports and makes recommendations to the Minister related to fisheries conservation. The term “grey literature” refers to unpublished reports including scientific assessment documents and working papers, government management reports and discussion papers, and industry briefs and position papers.

budget was geared towards a major restructuring or downsizing of government itself. In the mid-1990s, as a result of the first budget of then-Finance Minister Paul Martin, the federal DFO instituted major cutbacks in fisheries management services and introduced hefty increases in both licence fees and fees for service. Already suffering from the lack of fishing resources, the downloading of government costs to the fishery industry further favoured the survival of the wealthiest fishing enterprises and companies, which were more able to afford these additional costs. Again, there is no mention of this downsizing in the three books but it had a major impact on further eroding the position of those just hanging on and in solidifying the position of the new fishing elite.

The restructuring of the Atlantic fishery had thus, by the end of the 20th century, succeeded in redistributing fishery wealth from thousands of small fishing communities to an elite group of quota and licence holders. This concentration of ownership and wealth would supposedly enable a more competitive Canadian participation in a corporate global economy. Matthew Clarke, in an essay in *Retrenchment and Regeneration*, describes the recent tensions in a Newfoundland fishing community between the displaced fishing families and the fishers who still fish as well as the collective struggle with the implications of a restructured fishery: On the one hand, people identify themselves with the “traditional” fishery and the livelihood patterns of the past. On the other hand, there is a tentative but growing acceptance of the new model for the fishery involving large modern enterprises within an increasingly globalized and corporatized marketplace.⁷ It is because this new model for the fishery is now fully in place, and because there is a growing acceptance of this model in the fishing communities, that we can account for the optimism contained within DFO’s 2004 “A Policy Framework for the Management of Fisheries on Canada’s Atlantic Coast”.

Is this optimism, however, justified? If restructuring of the fishery has, for instance, hastened the demise of fish stocks, how can we expect this fully realized model to protect them now and contribute to their rebuilding? DFO’s answer, as indicated in its new policy document, is a “risk management framework” which would establish reference points based on indicators of fish stock health to determine the allowable levels of fishing effort. The government also advocates a precautionary approach that would set these reference points at conservative levels when there is an absence of sufficient scientific information.⁸

Given the weakened state of many Canadian Atlantic fish stocks, there may be a serious danger in depending too heavily on scientific assessments, even conservative ones, to protect the fish. In a key essay by Barbara Neis and Rob Kean in *Retrenchment and Regeneration*, the authors list six reasons why scientists did such a poor job in warning about the collapse of groundfish stocks:

1. Scientific neglect of life-history processes (an inadequate understanding of key components of fish stock biology)

7 Matthew Clark, “The Professionalization of Inshore Fishers”, in *Retrenchment and Regeneration*, p. 154.

8 Fisheries and Oceans, *A Policy Framework*, pp. 11-6.

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2. The shifting baseline syndrome (each generation of new scientists sees the current [declining] level of stock abundance as normal)
3. The gap between stock assessments and changes in fishing efficiency (scientific stock assessments cannot keep up with the constant changes in fishing technology that may mask declines in catch per unit of effort)
4. Limited understanding of the relationship between fishing and fish behaviour (scientific stock assessment cannot keep up with the ways fish may change their behaviour in relation to fishing pressure – thus masking declines in catch per unit of effort)
5. Fishing up, interfisheries interactions, bycatch and discarding (scientific stock assessments cannot keep up with the ways fishers may be constantly expanding and intensifying their fishing effort within one fishery or in multiple fisheries, and may be unable to assess the implications of legal or illegal supplementary or unexpected catches)
6. Fishing up and accelerated ecosystem degradation (scientists cannot keep up with the way fishers may be constantly expanding and intensifying their fishing efforts toward new species that may be lower in the food chain, slower to reproduce or easily depleted – thus undermining the functioning of the marine ecosystem as a whole)⁹

While it remains to be seen how DFO's risk management framework and precautionary approach will play out in reality, the analysis by Neis and Kean shows the great complexity of factors that a risk management framework must take into account.

Richard L. Haedrich and Johanne Fischer's modeling exercise in *The Resilient Outport*, "Thermodynamics for Marxists" (pp. 103-37), indicates that the best method to ensure the recovery of cod stocks to their former levels is through no fishing effort for 40 years or very limited fishing for a century. As bleak as the latter scenario appears, the number of fishing households supported by this level of fishing effort in the cod fishery after 40 to 50 years would be more than triple that supported by the level of fishing effort that is the standard recommendation currently (referred to as $F_{0.1}$).¹⁰ While it may be unwise to place too much faith in any modeling exercises, Haedrich and Fischer's analysis would support the view that true resiliency will only be possible when fish stocks are closer to their former pre-industrialized fisheries

9 See Barbara Neis and Rob Kean, "Why Fish Stocks Collapse: An Interdisciplinary Approach to the Problem of 'Fishing Up'", in *Retrenchment and Regeneration*, pp. 65-102.

10 The level of fishing effort known as Maximum Sustainable Yield (MSY) can lead to overfishing, scientists often recommend fishing at a more conservative biological level that at the same time maximizes economic yield. This level can have various names such as Maximum Economic Yield (MEY) or Optimum Economic Yield (OEY). $F_{0.1}$ is one such more conservative level of fishing effort and is defined as "the fishing mortality rate at which the increase in yield per recruit in weight for an increase in a unit of effort is only 10 per cent of the yield per recruit produced by the first unit of effort on the unexploited stock (i.e., the slope of the yield-per-recruit curve for the $F_{0.1}$ rate is only one-tenth the slope of the curve at its origin" (see http://www.nefsc.noaa.gov/techniques/tech_terms.html#tt5). The World Summit on Sustainable Development in 2002 recommended that all fishing nations adopt MSY as a maximum level of fishing effort. Some nations, such as Canada, use $F_{0.1}$ or other more conservative fishing level targets.

levels. If one understands fish stock or ecosystem resiliency as the capacity to bounce back from shocks and stresses, then it may be more appropriate in cases where fish are obviously not bouncing back from the stresses we place on them to concentrate on stock restoration before we can even consider conservation and sustainable use.

There may also be little reason for optimism as long as the Canadian Atlantic fishery is so heavily privatized. Despite DFO's continuing insistence that fish are a public resource to be managed for the benefit of all Canadians, the reality is that neither DFO nor the Canadian public has much control over how fish resources will be used. Fishing enterprises, collectively and in many cases individually, own millions of dollars worth of fishing quotas. What kind of real policy changes could DFO implement if they in any way threatened that loss of investment and value on the part of the quota and licence holders? To protect their investments, the enterprises would surely launch an avalanche of court cases against the federal government. Whether the potential wealth of the Atlantic fishery is reinvested in Atlantic Canada, other parts of Canada or elsewhere in the world, and whether it will accrue to the shareholders of corporations or to a broader-based social development, are decisions that will depend on where the quota and licence holders decide to invest that wealth.

The only way now to ensure that the fisheries are managed for the benefit of the Canadian public is for that public to become involved in fisheries management and policy. The three books clearly demonstrate that the century-long process of commercialization, industrialization and privatization of the Atlantic fisheries has lacked any local governance process.¹¹ It is precisely through a new process of community-based governance that the old process of community exploitation now made over with the glamorous face of global competitiveness can be revealed for what it is: the mining of renewable resources for the benefit of a few.

A participatory, inclusive and consensus-building process of community-based governance in coastal communities would undoubtedly lead to quite different recommendations for the best use of natural and social resources. This is not some romantic grasp at the past because the past was dominated by those politicians, merchants and elites who ensured that such a process could not get off the ground; the three books – *Set Adrift*, *The Resilient Outport* and *Retrenchment and Regeneration* – provide ample evidence of this. The elements for community-based governance have always been there in what Cadigan calls the “moral economy” and, when left alone, many of its principles governed the daily lives of people. But a true community-based governance only begins at the community and then quickly spreads its participatory, inclusive and consensus-building process to other communities, regions and sectors. It begins at the community, is driven by communities, but does not end with the community. It extends its reach to all levels of decision-making. Thus the community process becomes the public process.

There are immense obstacles to taking such an approach given the current policy climate and the reality of a privatized fishery. But efforts at community-based governance have begun throughout the Atlantic region as pockets of resistance to

11 See, in particular, Cadigan, “The Moral Economy” and J.D. House, “Does Community Matter in Newfoundland and Labrador? The Need for Supportive Capacity in the New Regional Economic Development”, in *Retrenchment and Regeneration*, pp. 14-42, 226-67.

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fisheries privatization or just as simple experiments in trying to do things more equitably and sustainably. Community-based governance is at a fledgling stage, but it is the best alternative to the model advanced by DFO and the corporate sector. This beginning stage could benefit from the formation of small “learning communities” composed of like-minded people from the remnants of the fisheries’ moral economy, the general community, First Nations and community-minded government officials and company representatives. These learning communities could become the laboratory where community-based governance is articulated, developed and advanced. Only then might we begin to find a vision for the Atlantic fisheries that is truly sustainable and for the benefit of all Canadians.

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